

## ABSTRACT OF THE DISCLOSURE

A design data generating apparatus for generating new  
5 design data of an article by performing a shape transformation process with respect to design data of the article which has been already generated comprises an input device which receives transformation instructions from an operator and an operation device which performs an operation of the design data in  
10 accordance with the input transformation instructions. The input device receives input of allocation of article shape attribute between an attribute of a transformation region which is to be transformed and an attribute of a maintaining region which maintains its shape, and input of a transformation  
15 instruction vector defined by a direction and an amount of transformation with respect to the article. The operation device performs a transformation process with respect to a node which defines an article shape of the transformation region in accordance with the transformation instruction vector.  
20 Specifically, the operation device fixes a node located at a boundary between the transformation region and the maintaining region, and transforms a node not located at the boundary. Thus, a new three-dimensional shape which the operator expects can be efficiently designed.